23. (New) The receiver as claimed in claim 11, wherein said sound generation means includes:

timer means; and

means for successively generating said tones, wherein each tone is successively generated for a predetermined interval.

B6 Cont'd

24. (New) The receiver as claimed in claim 14, wherein said sound generation means includes:

timer means; and

means for successively generating said tones, wherein each tone is successively generated for a predetermined interval.

REMARKS

Reconsideration of the patentability of the claims of the above identified patent application is solicited in view of the above amendments and the following comments.

It is appreciated that this application is under final rejection and that, after final rejection, the examiner has great latitude in entering amendments or refusing to enter amendments. In this specific case, it is believed that the above proposed amendments place this application in condition for allowance. Therefore, these amendments should be entered. If these amendments do not place this application in condition for allowance, they at least reduce the number of issues on appeal. For that reason alone, the above amendments should be entered.

It is also appreciated that, after final rejection, addition of further claims is not usually permitted. It is urged that this general practice, which is not required by rule or statute, not be enforced in this specific application. The claims that have been added by this amendment are all dependent claims and they all address matters that have been claimed elsewhere. Therefore, they do not introduce any new issues.

None of the above amendments introduce any new issues or prohibited new matter. Therefore, these claims should be entered and either allowed or an advisory action should be issued by the examiner.

Specifically, claims 1, 4, and 14 have been amended to replace the term "adapted to" with the expression "means for accomplishing the desired result" in order to positively define the invention.

In the outstanding action, claims 1, 2, 4-6, 11, 12, 17 have been rejected under 35 U.S.C. 102(b) as being anticipate by the WO publication to Motorola. However, it should be noted that the features of claim 2, and therefore also in the claims dependent therefrom, specifically that the sound generation means, that generates the series of tones, comprises at least one tone having a frequency that is controlled to provide at least a portion of a chromatic scale. This feature is not disclosed in the WO publication to Motorola.

Regarding claim 4-6, the Motorola reference fails to disclose the specifically claimed feature that the second portion of the first data is determined by the first portion of the first data. This reference further fails to disclose the feature that the third portion of the first data includes codes used for generating a succession of tones is determine by the first portion of the first data.

Regarding claim 11, the Motorola reference fails to disclose a particularly important feature defined by claim 11. Specifically, claim 11 requires that the control means includes comparing means that compares the data from the radio wave signal receiving means with said data from the registering means. The claim further provides for the system to read one of the predetermined different sound data patterns using the stored relation when the data from the signal receiving means agrees with the data from the registering means. This function supplies the selected sound data pattern to the sound generation means to generate at least one successive tone in accordance with one of the supplied predetermined different sound data patterns.

Regarding claim 12, the Motorola reference fails to disclose the claimed feature that the sound generation means successively generates the tones of a frequency that is controlled to provide at least a portion of a chromatic scale.

Claims 1-16 have also been rejected under 35 U. S. C.102 as being clearly anticipated by the Kahn reference. This rejection is respectfully traversed. It should be noted that in the reference, the song is transmitted on an audio channel and song information, such as title text, artists name or producers name relating to the particular song are broadcast on a particular channel as disclosed at col. 3, lines 20 - 25. That is, the song is transmitted on the audio channel through general coding and decoding processing to reproduce the variable waveform of the sound. On the other hand, claims 2 to 19 (claim 1 having been canceled) contain the feature that the sound generation means generates a succession of at least one predetermined different tones responsive to receipt of at least some of said plurality of codes to generate a series of said tones. That is, the code does not indicate the variable waveform of the sound, but indicates one of predetermined tones which is produced by a sound generation circuit in the receiver in response to a command signal corresponding to the code. Therefore, this claimed feature is not disclosed in the Kahn reference.

Claim 14 has been rejected under 35 U.S.C. 103(a) as being unpatentable over the WO publication to Motorola in view of the Wong reference. This rejection is respectfully traversed.

The Wong reference discloses a system wherein if the received call-back number matches one of the pre-programmed call-back numbers 226, 228, 230, the selective call receiver 110 generates one of the corresponding special alerts 136, 238, 240, (reference is made to col. 4, lines 18 –22 of the Wong reference). To the contrary, claim 14 requires that the registering means stores the input data in response to a registering command and stores the relation between the second data and one of the preprogrammed different sound data patterns in response to a selection command. Thus, the operation of the

registering means defined by claim 14 is different from the disclosure of the Wong reference.

Claims 3, 7, 13 and 16 have been rejected under 35U.S.C.103 as being unpatentable over the combination of the cited Motorola and Wong references, and further in view of the Fisch reference. This rejection is respectfully traversed.

The ABSTRACT of the Fisch reference discloses a digitized voice message that is stored in a fixed storage area. To the contrary, claim 3 requires that a voice tone generation means successively generates a voice tone as one of predetermined different tones responsive to receipt of at least some of the plurality of codes required to generate that series of that tone. That is, the voice tone generation means in claim 3 does not reproduce the digitized voice massage but generates a succession of voice tones. Therefore, the radio wave receiver defined by claim 3, 7, 13, and 16 is believed to be unobvious in view of the disclosure of the cited references.

Claims 8-10 have been rejected under 35 U.S.C. 103 (a) as being unpatentable over the Motorola publication as applied to the above claims, together with the disclosure of the Kawashima reference.

However, it should be noted that the Kawashima reference fails to disclose the timer, that is required by the rejected claims, for successively generating at least one of a succession of different tones for every predetermined interval.

The claims of this application have been amended to more clearly recite the invention, and claims 8 and 9 are amend with support at page 11, lines 22 and 23. From above discussion, it should be clear that each of the claims in this application is believed to be in condition for allowance.

It is not believed that any extension of time is due with the filing of this response. However, if an extension of time is required to maintain the pendency of this application,

kindly consider this to be a petition therefore. It is believed that the fee filed herewith is accurate and complete. If this is not the case, kindly charge any additional fee, or credit any overage, to the undersigned attorneys' deposit account 07-1337.

Respectfully submitted,

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APPENDIX

CLAIM AMENDMENTS

2. (Twice amended) [The pager as claimed in claim 1,] A radio wave receiver comprising:

radio wave signal receiving means for receiving a radio wave signal directed to said receiver; said signal including data including a plurality of codes;

display means responsive to receipt of said signal for displaying said data from said signal receiving means;

sound generation means for successively generating one of predetermined different tones responsive to receipt of at least some of said plurality of codes to generate a series of said tones, wherein each tone corresponds to one code, wherein said series of tones mm be the same or- different; and wherein said sound generation means that generates said succession of [a predetermined number of] tones comprises at least one tone having a frequency that is controlled to provide at least a portion of a chromatic scale.

3. (Twice amended) [The pager as claimed in claim 1,] A radio wave receiver comprising:

radio wave signal receiving means for receiving a radio wave signal directed to said receiver; said signal including data including

a plurality of codes;

display means responsive to receipt of said signal for displaying said data from said signal- receiving means;

sound generation means for successively generating one of predetermined different tones responsive to receipt of at least some of said plurality of codes to generate a series of said tones, wherein each tone corresponds to one code, wherein said series of tones may be the same or different, and wherein said sound generation means comprises:

voice data storing means for storing a set of voice tone data;

reading means for reading one of said voice tone data selected in accordance with said each of said codes; and

voice tone generation means for successively generating a voice tone as said one of said voice tone data from said reading means as said one of predetermined different tones, [said one of a predetermined number of said different tones] in accordance with said one of said voice tone data from said reading means.

4. (Twice amended) A radio wave receiver comprising:

radio wave signal receiving means for receiving [adapted to receive] a radio wave signal directed to said receiver, said signal including first data including a plurality of codes disposed in at least a third portion of said fist data;

detection means, including storing means for storing second data; for detecting whether, at least a first -portion of said first data agrees with said second data,

display means for displaying at least a second portion of said first data from said signal receiving means when at least said first portion of said first data agrees with said second data, said second portion being determined by said first portion; and

sound generation means for generating a succession of tones each being in accordance with each of said codes, respectively, in at least said third portion of said first data from said signal receiving means, when at least said first portion of said first data agrees with said second data; said third portion being determined by said first portion.

7. (Twice amended) The receiver as claimed in claim 4; wherein said sound generation means comprises:

voice data storing means for storing a set of voice tone data;

reading means for reading a succession of element of said voice tone data selected in accordance with said succession of said codes in at least said third portion of said first data; and

voice tone generation means for generating a succession of voice tones as said [predetermined number of said] succession of tones in accordance with an output of said reading means.

8. (Twice amended) The receiver as claimed in claim 4, wherein said sound generation means includes timer means and means for successively generating said [generates a] succession of [a predetermined number of] tones, each tone being successively generated at every [for a] predetermined interval.

9. (Twice amended) The- receiver as claimed in claim 8, wherein said sound generation means recurrently; successively generates [a] said succession of [a predetermined number of different] tones[, for a predetermined time interval in accordance with each of said codes in at least said third portion of said first data from said paging generation means].

10. (Twice amended) The receiver as claimed in claim 9, wherein said sound generation means stops generating at least one of said [predetermined number of different] tones [for a predetermined time interval in accordance with each of said codes in at least said third portion of said first data from said signal generation means recurrently] in response to a stop command.

11. (Twice amended) A radio wave receiver comprising:

radio wave signal receiving means for receiving a radio wave signal directed [directing] to said receiver, wherein said signal [including] includes data;

display means responsive to said signal receiving means for displaying said data from said signal receiving means;

storing means for storing [a] predetermined [number of] different sound data patterns;

registering means, including table means, for storing said [sound] data in response to a registering command signal and means for storing a relation between said stored data and one of said predetermined [number of] different sound data patterns in response to a selection command;

control means, including comparing means, for comparing said [signal] data from said signal receiving means with said data registering means and reading one of said predetermined [number of] different sound data patterns using said stored relation when

said data from said signal [data] receiving means agrees with said data from said registering means; and

sound generation means for successively generating at least one tone in accordance with the read [reading] one of said predetermined [number of] different sound data patterns.

13. (Twice amended) The receiver as claimed in claim 11, wherein said sound generation means comprises:

voice data storing means for storing a set of voice tone data;

reading means for reading one of said voice tone data selected in accordance with the read [reading] one of said predetermined [number of] different sound data patterns; and

voice tone generation means for generating a voice tone as said tone in accordance with an output of said reading means.

14. (Twice amended) A radio wave receiver comprising:

radio wave signal receiving means for receiving [adopted to receive] a signal directed to said receiver, said signal including first data;

display means responsive to said signal receiving means for displaying said data from said signal receiving means;

storing means for storing [adapted to store a] predetermined [number of] different sound data patterns;

input means for inputting second data;

registering means, including table means, for storing said second data in response to a registering command signal and storing a relation between said second data from said input means and one of said predetermined number of different sound data patterns in response to a selection command;

control means, including comparing means, for comparing said first data from said signal receiving means with said second data from said registering means and reading one of said predetermined [number ofl different sound data patterns using said

stored relation when said first data from said [paging] signal receiving means agrees with said second data from said registering means; and

sound generation means for successively generating at least a tone in accordance with the read [reading] one of said predetermined [number of] different sound data patterns.

16. (Twice amended) The receiver as claimed in claim 14, wherein said sound generation means comprises: voice data storing means for storing a set of voice tone data; reading means for reading one of said voice tone data selected in accordance with the reading one of said predetermined [number of] different sound data patterns; and voice tone generation means for generating a voice tone as said tone in accordance with an output of said reading means.

17. (Amended) A receiver as claimed in claim 2 [1], configured as a pager.

TITLE OF THE INVENTION

A PAGER WITH AN ALERT SOUND CONTROLLED

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates to a pager with an alert sound.

2. Description of the Prior Art

A pager having an alerting function for generating one of a plurality of predetermined sound selected in accordance with user's operation is known.

Fig. 9 is a block diagram of such a prior art pager. This pager generates an alert sound A when the received address agrees with one of the registered address number data in memory 113 by a speaker and generates an alert sound B when the received address does not agrees with any one of the registered address number data in memory 113.

SUMMARY OF THE INVENTION

The aim of the present invention is to provide a superior pager.

According to the present invention, a first pager is provided, which comprises: a paging signal receiving circuit for receiving a paging signal directing to the pager, the paging signal including data including a plurality of codes; a display responsive to the paging signal receiving circuit and a display command for

displaying the data from the paging signal receiving circuit; and a sound generation circuit for successively generating one of a predetermined number of different tones in accordance with each of the codes.

In the first pager, the sound generation circuit may successively generate the one of a predetermined number of different tones of which a frequency is controlled to provide at least a portion of a chromatic scale.

In the first pager, the sound generation circuit may comprise: a voice data memory for storing a set of voice tone data; a reading circuit for reading one of the voice tone data selected in accordance with the each of the codes; and a voice tone generation circuit for generating a voice tone as the one of a predetermined number of the different tones in accordance with the one of the voice tone data from the reading circuit.

According to the present invention, a second pager is provided, which comprises: a paging signal receiving circuit for receiving a paging signal directed to the pager, the paging signal including first data including a plurality of codes; a detection portion, including a memory for storing second data, for detecting whether at least a first portion of the first data agrees with the second data; a display for displaying at least a second portion of the first data from the paging signal receiving circuit when at

least the first portion of the first data agrees with the second data, the second portion being determined by the first portion; and a sound generation circuit for successively generating one of a predetermined number of different tones in accordance with each of the codes in at least a third portion of the first data from the paging signal receiving circuit when at least the first portion of the first data agrees with the second data, the third portion being determined by the first portion.

In the second pager may further comprise a registering portion for storing the first data in the memory as the second data in response a registering command signal.

In the second pager, the sound generation circuit may successively generate the one of a predetermined number of different tones of which a frequency is controlled to provide at least a portion of a chromatic scale.

In the second pager, the sound generation circuit may comprise: a voice data memory for storing a set of voice tone data; a reading circuit for reading one of the voice tone data selected in accordance with the each of the codes in at least the third portion; and a voice tone generation circuit for successively generating a voice tone as the one of a predetermined number of the different tones in accordance with an output of the reading circuit.

In the second pager, the sound generation circuit may include a timer and successively generates the one of a predetermined number of different tones for a predetermined interval. In this case, the sound generation circuit may successively generate successively generates the one of a predetermined number of different tones for a predetermined interval in accordance with each of the codes in at least the third portion of the first data from the paging signal receiving circuit recurrently. In this case, the sound generation circuit may stop successively generating the one of a predetermined number of different tones for a predetermined interval in accordance with each of the codes in at least the third portion of the first data from the paging signal receiving circuit recurrently in response to a stop command.

According to the present invention, a third pager is provided, which comprises: a paging signal receiving circuit for receiving a paging signal directing to the pager, the paging signal including data; a display responsive to the paging signal receiving circuit for displaying the data from the paging signal receiving circuit; a memory for storing a predetermined number of different sound data patterns; a registering portion, including a table, for storing the data in response to a registering command signal and storing a relation between

the stored data and one of the predetermined number of different sound data patterns in response to a selection command; a control portion, including comparing portion, for comparing the data from the paging signal receiving circuit with the data from the registering portion and reading one of the predetermined number of different sound data patterns using the stored relation when the data from the paging signal receiving circuit agrees with the data from the registering portion; and a sound generation circuit for successively generating a tone in accordance with the reading one of the predetermined number of different sound data patterns.

In the third pager, the sound generation circuit may successively generate the tone of which frequency is controlled to provide at least a portion of a chromatic scale.

In the third pager, the sound generation circuit may comprise: a voice data memory for storing a set of voice tone data; a reading circuit for reading one of the voice tone data selected in accordance with the reading one of the predetermined number of different sound data patterns; and a voice tone generation circuit for generating a voice tone as the tone in accordance with an output of the reading circuit.

According to the present invention, a fourth pager

is provided, which comprises: a paging signal receiving circuit for receiving a paging signal directed to the pager, the paging signal including first data; a display responsive to the paging signal receiving circuit for displaying the data from the paging signal receiving circuit; a memory for storing a predetermined number of different sound data patterns; an input circuit for inputting second data; a registering portion, including a table, for storing the second data in response to a registering command signal and storing a relation between the second data from the input circuit and one of the predetermined number of different sound data patterns in response to a selection command; a control portion, including comparing portion, for comparing the first data from the paging signal receiving circuit with the second data from the registering portion and reading one of the predetermined number of different sound data patterns using the stored relation when the first data from the paging signal receiving circuit agrees with the second data from the registering circuit; and a sound generation circuit for successively generating a tone in accordance with the reading one of the predetermined number of different sound data patterns.

In the fourth pager, the sound generation circuit may successively generate the tone of which frequency is

controlled to provide at least a portion of a chromatic scale.

In the fourth pager, the sound generation circuit may comprise: a voice data memory for storing a set of voice tone data; a reading circuit for reading one of the voice tone data selected in accordance with the reading one of the predetermined number of different sound data patterns; and a voice tone generation circuit for generating a voice tone as the tone in accordance with an output of the reading circuit.

BRIEF DESCRIPTION OF THE DRAWINGS

The object and features of the present invention will become more readily apparent from the following detailed description taken in conjunction with the accompanying drawings in which:

Fig. 1 is a block diagram of a pager of a first embodiment;

Fig. 2 shows a table of the first embodiment;

Fig. 3 is a flow chart of the first embodiment showing an operation by a user to the pager of the first embodiment;

Fig. 4 is a illustration of the first embodiment showing a format of the data to be transmitted to the pager of the first embodiment;

Fig. 5 is a block diagram of a frequency signal

generation circuit of a modification;

Fig. 6 is a block diagram of a pager of the second embodiment;

Fig. 7 is an illustration of the second embodiment showing data stored in the table shown in Fig. 6;

Fig. 8 depicts a flow chart of the second embodiment showing an operation to the pager of the second embodiment; and

Fig. 9 is a block diagram of such a prior art pager.

The same or corresponding elements or parts are designated with like references throughout the drawings.

DETAILED DESCRIPTION OF THE INVENTION

Hereinbelow will be described a first embodiment of this invention.

Fig. 1 is a block diagram of a pager of the first embodiment. The pager of the first embodiment comprises an antenna 7 for receiving a paging signal transmitted as a radio wave signal, a demodulation circuit 8 for demodulating the paging signal from the antenna 7, a decoding circuit 9 for decoding the demodulated paging signal, a storing circuit 9 for receiving a paging signal directing to the pager and storing the paging signal through comparing an identification code (address data) in the paging signal with the identification code assigned to the pager, the paging signal including first data including

a plurality of codes, a data separation portion 10 including a data analyzing portion 11, buffers 12 and 13 for separating data in the decode paging signal into sound data and sound message data and storing the sound data in the buffer 12 and the message data in the buffer 13, a display 4 for displaying the message data from the buffer ~~12~~ 13, and a frequency signal generation circuit 22 and a speaker 5 for successively broadcasting generating one of a predetermined number of different tones in accordance with each code from the buffer 12 for a predetermined interval determined by a timer 13.

The antenna 7 receives the paging signal transmitted as a radio wave signal. The demodulation circuit 8 demodulates the paging signal from the antenna 7. The decoding circuit 6 decodes the demodulated paging signal. The storing circuit 9 stores the data in the paging signal receiving identifying that for receiving the paging signal directing to the pager. That is, the identification code in the paging signal is compared with the identification code assigned to the pager. The paging signal includes first data including a plurality of codes. A CPU 3 includes the data separation portion (program) 10, a data analyzing portion 11, the buffers 12 and 13, and a timer 14.

The separation portion 10 analyzes the data from the storing circuit 9 and separates it into sound data and message sound data and stores the sound data in the buffer 12 and

the message data in the buffer 13. The display 4 displays the message data from the buffer 13. The frequency signal generation circuit 22 and the speaker 5 successively generate one of a predetermined number of different tones in accordance with each code in the sound data from the buffer 12 for the predetermined interval determined by the timer 14. That is, the frequency signal generation circuit 22 generates a frequency signal 15 and the speaker 5 broadcasts the tone in response to the frequency signal. As the frequency signal generation circuit 22, a melody IC may be used for generating chromatic scale sounds.

Fig. 2 shows a table of the first embodiment.

Each code of the sound data includes two digits. That is, "00" represents a tone of "C" and "05" represents a tone of "A" whose frequency is 440 Hz for example. Then, a series of tones is generated in accordance with the digits shown in the table in Fig. 2 in the format forms a chromatic scale.

Fig. 3 is a flow chart of the first embodiment showing an operation by a user to the pager of the first embodiment. A user generates and transmits the sound data and the message data in accordance with the operation shown in Fig. 3. Fig. 4 is a illustration of the first embodiment showing a format of the data to be transmitted to the pager inputted by the operation in accordance with the flow chart shown in Fig. 3.

The user input an address (identification code) by operating keys on a telephone (not shown) connected to a public telephone network in step s11. Then, the user inputs "**", as a special code for identifying the sound data in step s12, and then inputs sound data for example "00 01 02 03 04" in step s13. Then, the user inputs "**" again to indicate completion of the sound data in step s14. That is, the sound data is sandwiched between the special codes "**". In the following step s15, the user further inputs display (message) data and ends the operation in step s16.

The data inputted and transmitted as mentioned is shown in Fig. 4. That is, the sound data is indicated by the special codes "**" and the message data following to the sound data is to be displayed on the display 4.

When the data shown in Fig. 4 is received by the pager of the first embodiment, the data analyzing portion 11 detects the special codes "**" 120a and 120b, and stores the sound data 121 indicated by the special codes "**" 120a and 120b in the buffer 12 and stores the message data 22 "HAPPY ···" following to the special code "**" 120b in the buffer 13. The sound data is read in response to the timer 14 every a predetermined interval. If the message data does not include the special codes 120a and 120b, a conventional alert sound is generated.

The message data is displayed on the display 4 in response to reception of the paging signal or a display command 18. The tones from the speaker 5 is stopped in response to a stop command 17.

Modification will be described. Fig. 5 is a block diagram of a frequency signal generation circuit of a modification. The frequency signal generation circuit 22b includes a sound reproducing circuit 22c and a voice data memory 22d. The sound reproducing circuit 22c generates a voice tone in accordance with the sound data 121. In this case, the codes including two digits shown in Fig. 2, is assigned to each voice sound.

As described, the pager can receive a sound message and can display the message.

A second embodiment will be described.

Fig. 6 is a block diagram of a pager of the second embodiment.

The pager of the second embodiment comprises a paging signal receiving portion including the antenna 7, a demodulator 8, and a decoding circuit 6, a storing circuit 9 for receiving a paging signal directing to the pager, the paging signal including first data (message data), the display 4 responsive to the paging signal receiving portion for displaying the first data from the paging signal receiving portion, a CPU 23 including a memory 26b for

storing a predetermined number of different sound data patterns and a table 26a for storing the first data in response to a registering command signal 45 as second data and storing a relation between the stored data and one of the predetermined number of different sound data patterns in response to a selection command 44a, a control portion 26 for comparing the first data with the registration registered data in the table 26a and reading one of the predetermined number of different sound data patterns in the memory 26b using the stored relation when the first data from the paging signal receiving portion agrees with the second data from the table 26a, a sound generation circuit 22 or 22b for successively generating a tone in accordance with a reading one of the predetermined number of different sound data patterns from the memory 26b and outputting a sound from the speaker 5.

The paging signal receiving portion receives the paging signal directed to the pager. The display 4 displays the first data 9a from the paging signal receiving portion. The memory 26b stores a predetermined number of different sound data patterns. The table 26a stores the first data 9a as the second data and stores a relation between the stored data and one of the predetermined number of different sound data patterns in response to the registering command signal 45a from registering switch 45

and a selection command 44a from a selection switch 44. The control portion 26 compares the first data 9a with data registered in the table 26a and reads one of the predetermined number of different sound data patterns using the stored relation in the table 26a when the first data from the paging signal receiving portion agrees with the data from the table 26a. That is, when the first data 9a from the paging signal receiving portion agrees with the data in the table 26a, one of the predetermined number of different sound data patterns is read in accordance with the relation stored in the table 26a. The sound generation circuit 22 or 22b successively generates at least one tone in accordance with the reading one of the predetermined number of different sound data patterns from the memory 26b and outputs a sound from the speaker 5.

Fig. 7 is an illustration of data stored in the table shown in Fig. 6. Fig. 8 shows a flow chart of the second embodiment showing an operation of the pager of the second embodiment.

The message data to be stored is displayed on the display 4 in response to the paging signal receiving portion or a display switch 46 and the user depresses a mode switch 43 and a selection switch 44 to enter the registering mode in step s21. In response to activation of the mode switch, the pager stores the displayed message data in the

table 26a. In the following step s22, the user operates the selection switch 44 to display image data of one of the sound patterns and the pager scrolls to successively display the sound patterns in response to the selection switch 44. When the user finds the desired one of the sound data pattern, the user depresses the registering switch 45 in step s23 and then the pager stores the relation between the registered message data in the table 26a and the desired one of the sound data pattern. Then, the user depresses the mode switch 43 to return to the previous mode. Fig. 7 shows this relation. After the registering operation, when the message data is received and compared with each of the registered data train 26c by the control portion 26. When the received message data agrees with one of the registered data train, the sound pattern name data is supplied to the memory 26b. The memory 26b outputs the sound data pattern corresponding to the sound pattern name data 26d.

In the second embodiment, as similar to the first embodiment, the frequency signal generation circuit 22 generates a tone of which frequency is controlled in accordance with one of the sound data patterns corresponding to the first data 9a and, if the frequency signal generation circuit 22b shown in Fig. 5 is used, a voice sound is generated in accordance with one of the

sound patterns corresponding to the first data 9a. If the message data does not agree with any of the registered message data, the control portion 26 generates the conventional alert sound.

Moreover, the pager of the second embodiment can prepare a message to be registered in the table 26a.

The user operates the mode switch 43 and the selection switch 44 to enter a message preparing mode. A data generation portion generates character data and displays them on the display 4. The data generator 27 scrolls the display image to select one of the character data desired by the user in response to the selection switch 44. When the character displayed on the display 4 is desired one, the user depresses the selection switch 44 to store the displayed character stored in a memory 28. This operation is repeated to prepare a message which is stored in the memory 28. When the message has been prepared, the user depresses the registering switch 45. In response to this, the prepared message data are supplied to the table 26a and registered. Then, the user registers one of the sound data patterns corresponding to the prepared message data in the sound data pattern registering operation as shown in Fig. 8. When the first data 9a agrees with one of the registered messages that was prepared by the operation by the user, the corresponding

sound data pattern is reproduced.